Designing and Producing

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Overview

- Strategies for creating interactive multimedia.
- Designing a multimedia project.
- Producing a multimedia project.

Strategies for Creating Interactive Multimedia

- Designing and building multimedia projects go hand-in-hand.
- Balance proposed changes against their cost.
- Feedback loops and good communication between the design and production effort are critical to the success of a project.

Strategies for Creating Interactive Multimedia

- A user can either describe the project in minute details, or can build a less-detailed storyboard and spend more effort in actually rendering the project.
- The method chosen depends upon the scope of a project, the size and style of the team, and whether the same people will do design and development.
- If the design team is separate from the development team, it is best to produce a detailed design first.

Designing a Multimedia Project

- Designing a multimedia project requires knowledge and skill with computers, talent in graphics, arts, video, and music, and the ability to conceptualize logical pathways.
- Designing involves thinking, choosing, making, and doing.

Designing a Multimedia Project

- Designing the structure.
- Designing the user interface.

Designing the Structure

- The manner in which project material is organized has just as great an impact on the viewer as the content itself.
- Mapping the structure of a project should be done early in the planning phase.

Designing the Structure

- Navigation maps are also known as site maps.
- They help organize the content and messages.
- Navigation maps provide a hierarchical table of contents and a chart of the logical flow of the interactive interface.
- Navigation maps are essentially non-linear.

Designing the Structure

There are four fundamental organizing structures:

- Linear - Users navigate sequentially, from one frame of information to another.
- Hierarchical - Users navigate along the branches of a tree structure that is shaped by the natural logic of the content. It is also called linear with branching.

Designing the Structure

There are four fundamental organizing structures (continued):

- Non-linear - Users navigate freely through the content, unbound by predetermined routes.
- Composite - Users may navigate non-linearly, but are occasionally constrained to linear presentations.

Designing the Structure

- The navigation system should be designed in such a manner that viewers are given free choice.
- The architectural drawings for a multimedia project are storyboards and navigation maps.
- Storyboards are linked to navigation maps during the design process, and help to visualize the information architecture.

Designing the Structure

A user can design their product using two types of structures:

- Depth structure - Represents the complete navigation map and describes all the links between all the components of the project.
- Surface structure - Represents the structures actually realized by a user while navigating the depth structure.

Designing the Structure

Hotspots:

- Add interactivity to a multimedia project.
- The three categories of hotspots are text, graphic, and icon.
- The simplest hot spots on the Web are the text anchors that link a document to other documents.

Designing the Structure

- Hyperlinks - A hotspot that connects a viewer to another part of the same document, a different document, or another Web site is called a hyperlink.
- Image maps - Larger images that are sectioned into hot areas with associated links are called image maps.

Designing the Structure

- Icons - Icons are fundamental graphic objects symbolic of an activity or concept.
- Buttons - A graphic image that is a hotspot is called a button.

Designing the Structure

- Plug-ins such as Flash, Shockwave, or JavaScripts enable users to create plain or animated buttons.
- Small JPEG or GIF images that are themselves anchor links can also serve as buttons on the Web.
- Highlighting a button is the most common method of distinguishing it.

Designing the Structure

- It is essential to follow accepted conventions for button design and grouping, visual and audio feedback, and navigation structure.
- Avoid hidden commands and unusual keystroke/mouse click combinations.

Designing the User Interface

- The user interface of a project is a blend of its graphic elements and its navigation system.
- The simplest solution for handling varied levels of user expertise is to provide a modal interface.
- In a modal interface, the viewer can simply click a Novice/Expert button and change the approach of the whole interface.

Designing the User Interface

- Modal interfaces are not suitable for multimedia projects.
- The solution is to build a project that can contain plenty of navigational power, which provides access to content and tasks for users at all levels.
- The interface should be simple and user-friendly.

Designing the User Interface

Graphical user interface (GUI):

- The GUIs of Macintosh and Windows are successful due to their simplicity, consistency, and ease of use.
- GUIs offer built-in help systems, and provide standard patterns of activity that produce the standard expected results.

Designing the User Interface

Graphical approaches that work:

- Plenty of "non-information areas," or white space in the screens.
- Neatly executed contrasts.
- Gradients.
- Shadows.
- Eye-grabbers.

Designing the User Interface

Graphical approaches to avoid:

- Clashes of color.
- Busy screens.
- Requiring more than two button clicks to quit.
- Too many numbers and words.
- Too many substantive elements presented too quickly.

Designing the User Interface

Audio interface:

- A multimedia user interface can include sound elements.
- Sounds can be background music, special effects for button clicks, voice-overs, effects synced to animation.
- Always provide a toggle switch to disable sound.

Producing a Multimedia Project

- In the development or the production phase, the project plan becomes the systematic instruction manual for building the project.
- The production stage requires good organization and detailed management oversight during the entire construction process.

Producing a Multimedia Project

- A good time-accounting system for everyone working on a project is required to keep track of the time spent on individual tasks.
- It is important to check the development hardware and software and review the organizational and administrative setup.

Producing a Multimedia Project

Potential problems can be avoided by answering these questions:

- Is there sufficient disk storage space for all files?
- Is the expertise available for all stages of the project?
- Is there a system for backing up critical files?
- Are the financial arrangements secure?
- Are the communications pathways open with clients?

Producing a Multimedia Project

Working with clients:

- Have a system in place for good communication between the client and the people actually building the project.
- Control the client review process to avoid endless feedback loops.

Producing a Multimedia Project

Working with clients (continued):

- Develop a scheme that specifies the number and duration of client approval cycles.
- Provide a mechanism for change orders when changes are requested after sign-off.

Producing a Multimedia Project

Data storage media and transportation:

- This is necessary so that a client is easily able to review the work.
- There needs to be a matching data transfer system and media.
- Access to the Internet at high bandwidth is preferred.
- The most cost-effective and time-saving methods of transportation are CD-R or DVD-ROMs.

Producing a Multimedia Project

Tracking:

- Organize a method for tracking the receipt of material to be incorporated in a project.
- Develop a file-naming convention specific to your project's structure.

Producing a Multimedia Project

Tracking (continued):

- Store the files in directories or folders with logical names.
- To address cross-platform issues, develop a file identification system that uses the DOS file-naming convention of eight characters plus a three-character extension.

Producing a Multimedia Project

Tracking and copyrighting:

- Version control of your files is very important, especially in large projects.
- If storage space allows, archive all file iterations.
- Insert a copyright statement in the project that legally designates the code as the creator's intellectual property.
- Copyright and ownership statements are embedded in <meta> tags at the top of a HTML page.

Summary

- Feedback loops and good communication between the design and the production efforts are critical to the success of a project.
- The four fundamental organizing structures are linear, non-linear, hierarchical, and composite.
- The user interface should be simple, user-friendly, and easy to navigate.

Summary

- The three categories of hotspots are text, graphic, and icon.
- A multimedia project is actually rendered in the production stage.